

Serial No.: 09/404,940

Attorney Docket No: MCS-023-01

IN THE CLAIMS

Please cancel claim 31 without prejudice.

Please add new claim 32 as follows:

Please amend claims 1 and 19 as follows:

1. (Currently Amended) A computer-implemented method comprising:
inputting a training set including a plurality of images and a corresponding plurality of aesthetic scores for the images;
training a classifier to provide aesthetic scores based on the training set;
generating an aesthetic score for an image based on the classifier; and
generating a recommendation that suggests how to improve the aesthetic score for the image by manipulating visual elements of the image.
2. (Canceled)
3. (Canceled)
4. (Previously Presented) The method of claim 1, wherein generating a recommendation comprises utilizing a gradient ascent.
5. (Previously Presented) The method of claim 1, wherein generating a recommendation comprises performing a local search.
6. (Original) The method of claim 1, wherein training a classifier comprises training one of a Bayesian classifier, a Support Vector Machine (SVM) classifier, a neural net classifier, and a decision tree classifier.

Serial No.: 09/404,940

Attorney Docket No: MCS-023-01

7. (Original) The method of claim 1, wherein training a classifier comprises utilizing feature selection to correlate at least one image feature of the images with their corresponding aesthetic scores.

8. (Original) The method of claim 7, wherein utilizing feature selection to correlate at least one image feature comprises utilizing feature selection to correlate at least one image feature selected from the group essentially consisting of: color presence, color distribution, geometrical quantities of segmented image parts, coefficients of image transformations, and higher-level image representations.

9. (Previously Presented) A computer-implemented method comprising:
inputting an image;
generating an aesthetic score for the image by utilizing a classifier previously trained on a training set including a plurality of images and a corresponding plurality of aesthetic scores for the images; and,
generating a recommendation to improve the aesthetic score.

10. (Original) The method of claim 9, wherein generating an aesthetic score comprises generating an aesthetic score based on at least one image feature of the image.

11. (Original) The method of claim 10, wherein generating an aesthetic score based on at least one image feature of the image comprises generating an aesthetic score based on at least one image feature selected from the group essentially consisting of: color presence, color distribution, geometrical quantities of segmented image parts, coefficients of image transformations, and higher-level image representations.

12. (Original) The method claim 9, wherein utilizing a classifier comprises utilizing one of a Bayesian classifier, a Support Vector Machine (SVM classifier, a neural net classifier, and a decision tree classifier.

Serial No.: 09/404,940

Attorney Docket No: MCS-023-01

13. (Original) A computer-implemented method comprising:
inputting an image and a corresponding aesthetic score for the image
previously generated by utilizing a classifier previously trained on a training set including a
plurality of images and a corresponding plurality of aesthetic scores for the images;
generating a recommendation to improve the aesthetic score for the image;
and,
outputting the recommendation.
14. (Original) The method of claim 13, wherein generating a recommendation
comprises utilizing a gradient ascent.
15. (Original) The method of claim 13, wherein generating a recommendation
comprises performing a local search.
16. (Original) The method of claim 13, wherein inputting an image and a
corresponding aesthetic score comprises inputting an image and a corresponding
aesthetic score for the image previously generated based on at least one image feature of
the image.
17. (Original) The method of claim 16, wherein inputting an image and a
corresponding aesthetic score for the image previously generated based on at least one
image feature of the image comprises inputting an image and a corresponding aesthetic
score for the image previously generated based on at least one image feature of the
image selected from the group essentially consisting of: color presence, color distribution,
geometrical quantities of segmented image parts, coefficients of image transformations,
and higher-level image representations.
18. (Original) The method of claim 13, wherein inputting an image and a
corresponding aesthetic score comprises inputting an image and a corresponding
aesthetic score for the image previously generated by utilizing one of a Bayesian classifier,

Serial No.: 09/404,940

Attorney Docket No: MCS-023-01

a Support Vector Machine (SVM) classifier, a neural net classifier, and a decision tree classifier.

19. (Currently Amended) A machine-readable medium having instructions stored thereon for execution by a processor to perform a method comprising:

- inputting a training set including a plurality of images and a corresponding plurality of aesthetic scores for the images;
- training a classifier to provide aesthetic scores based on the training set;
- inputting an image and utilizing the classifier to generate a corresponding aesthetic score for the image; and
- generating a recommendation that suggests which visual elements of the image to manipulate to improve the corresponding aesthetic score, wherein the visual elements are capable of being manipulated by a computer.

20. (Original) The method of claim 19, wherein training a classifier comprises training one of a Bayesian classifier, a Support Vector Machine (SVM) classifier, a neural net classifier, and a decision tree classifier.

21. (Original) The method of claim 19, wherein training a classifier comprises utilizing feature selection to correlate at least one image feature of the images with their corresponding aesthetic scores.

22. (Previously Presented) A machine-readable medium having instructions stored thereon for execution by a processor to perform a method comprising:

- inputting an image;
- generating an aesthetic score for the image by utilizing a classifier previously trained on a training set including a plurality of images and a corresponding plurality of aesthetic scores for the images;
- outputting the image; and,
- generating and outputting a recommendation as to how to improve the aesthetic score for the image.

Serial No.: 09/404,940

Attorney Docket No: MCS-023-01

23. (Original) The medium of claim 22, wherein generating an aesthetic score comprises generating an aesthetic score based on at least one image feature of the image.

24. (Original) The medium of claim 22, wherein utilizing a classifier comprises utilizing one of a Bayesian classifier, a Support Vector Machine (SVM) classifier, a neural net classifier, and a decision tree classifier.

25. (Original) A machine-readable medium having instructions stored thereon for execution by a processor to perform a method comprising:

inputting an image and a corresponding aesthetic score for the image previously generated by utilizing a classifier previously trained on a training set including a plurality of images and a corresponding plurality of aesthetic scores for the images;

generating a recommendation to improve the aesthetic score for the image; and,

outputting the recommendation.

26. (Original) The medium of claim 25, wherein generating a recommendation comprises utilizing a gradient ascent.

27. (Original) The medium of claim 25, wherein generating a recommendation comprises performing a local search.

28. (Original) The medium of claim 25, wherein inputting an image and a corresponding aesthetic score comprises inputting an image and a corresponding aesthetic score for the image previously generated based on at least one image feature of the image.

29. (Original) The medium of claim 25, wherein inputting an image and a corresponding aesthetic score comprises inputting an image and a corresponding

Serial No.: 08/404,940

Attorney Docket No: MCS-023-01

aesthetic score for the image previously generated by utilizing one of a Bayesian classifier, a Support Vector Machine (SVM) classifier, a neural net classifier, and a decision tree classifier.

30. (Canceled)

31. (Canceled)

32. (New) The method of claim 19, wherein the image includes at least one of: (a) a web page; (b) a digital photograph; (c) an electronic greeting card; (d) a desktop-publishing document; (e) a word-processing document.